Table 9 NON-CRITERIA/NON-HAP REGULATED POLLUTANTS De Minimus Emissions Levels		
Pollutant	**Minimum Emissions (lbs/yr)**	**Corresponding Tons/Yr**
2-Butoxy-Ethanol	0	0
2-(2-Butoxyethoxy)-Ethanol	0	0
Dioxin/Furans	0	0
Fluorides	53.05	0.03
Municipal solid waste landfill emissions	500	0.25
Total reduced sulfur	0	0
Sulfuric acid (hydrogen sulfide)	21.22	0.01
Sulfuric acid mist	21.22	0.01

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF AIR QUALITY

General Instructions for sources submitting

2007 ACTUAL EMISSIONS INVENTORY

IMPORTANT

Please read the entire booklet before beginning.

Be sure to keep a copy of the completed inventory and calculations for your own records, while sending the original forms to the Division of Air Quality.

JANUARY 2008

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Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
75569	Propylene oxide	500.00	0.25
106467	p-Dichlorobenzene	500.00	0.25
106423	p-Xylenes	500.00	0.25
91225	Quinoline	0.00	0.00
106514	Quinone	9.38	0.00
82688	Quintobenzene	10.61	0.01
	Radionuclides (including radon) /5/	0.00	0.00
7782492	Selenium	4.24	0.00
	Selenium Compounds	4.24	0.00
7791233	Selenium Oxychloride	4.24	0.00
100425	Styrene	500.00	0.25
96093	Styrene oxide	0.00	0.00
7664939*	Sulfuric Acid, Nickel(2+) Salt (1	7.07	0.00
1746016	TCDD	0.00	0.00
	TCDF	0.00	0.00
95807	TDA	0.00	0.00
127184	Tetrachloroethylene (Perchloroethylene)	500.00	0.25
25322207	Tetrachloroethane	0.00	0.00
7550450*	Titanium tetrachloride	0.00	0.00
108883	Toluene	500.00	0.25
95807	Toluene-2,4-diamine	0.00	0.00
26471625	Toluene-2,4-Diisocyanate	0.56	0.00
8001352	Toxaphene (chlorinated camphene)	10.61	0.01
542756	Trans-1,3-Dichloropropene	96.32	.05
12002481	Trichlorobenzene	0.00	0.00
79016	Trichloroethylene	500.00	0.25
121448	Triethylamine	87.82	0.04
	Triethylene Glycol	0.00	0.00
1582098	Trifluralin	0.00	0.00
108054	Vinyl acetate	500.00	0.25
593602	Vinyl bromide	15.46	0.01
75014	Vinyl chloride	18.07	0.01
79005	Vinyl Trichloride	500.00	0..25
75354	Vinylidene chloride (1,1-Dichloroethylene)	420.71	0.21
1330207	Xylenes (isomers and mixture)	500.00	0.25

NOTE: Methyl ethyl ketone (2-Butanone), and ethylene glycol monobutyl ether are no longer considered to be HAPs.

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
62759	N-Nitrosodimethylamine	0.00	0.00
59892	N-Nitrosomorpholine	0.00	0.00
684935	N-Nitroso-N-methylurea	0.00	0.00
119904	o,o-Diansidine	0.00	0.00
90040	o-Anisidine	10.69	0.01
95487	o-Cresol	469.27	0.23
95534	o-Toluidine	185.99	0.09
95476	o-Xylenes	500.00	0.25
	PAH	0.00	0.00
106467	para-Dichlorobenzene	500.00	0.25
56382	Parathion	2.12	0.00
92671	p-Aminodiphenyl	0.00	0.00
	p-Cresol	469.27	0.23
106467	P-Dichlorobenzene	500.00	0.25
92933	p-Nitrobiphenyl	0.00	0.00
92671	p-Phenylaniline	0.00	0.00
82688	Pentachloronitrobenzene (Quintobenzene)	10.61	0.01
87865	Pentachlorophenol	10.61	0.01
127184 *	Perchloroethylene	500.00	0.25
88062	Phenachlor	0.00	0.00
108952	Phenol	408.39	0.20
64006	Phenol, 3-(1-Methylethyl)-Methylca	0.00	0.00
100414	Phenylethane	500.00	0.25
62384	Phenylmercuric Acetate	0.21	0.00
75445	Phosgene	8.59	0.00
7803512 *	Phosphine	8.85	0.00
7723140*	Phosphorus	2.15	0.00
	Phosphorus Compounds	2.12	0.00
85449	Phthalic anhydride	128.54	0.06
1336363	Polychlorinated biphenyls (Aroclors)	0.00	0.00
	Polycyclic aromatic hydrocarbons	0.00	0.00
	Polycylic Organic Matter (POM)	0.00	0.00
106503	p-Phenylenediamine	2.12	0.00
123386	Propionaldehyde	0.00	0.00
114261	Propoxur (Baygon)	10.61	0.01
78875	Propylene dichloride (1,2-Dichloropropane)	500.00	0.25
	Propylene Glycol Butyl Ether	0.00	0.00
107982	Propylene Glycol Monomethyl Ether	500.00	0.25

GENERAL INSTRUCTIONS FOR THE
CRITERIA & HAZARDOUS AIR POLLUTANT INVENTORY

EMISSION INVENTORY INFORMATION
MUST BE SUBMITTED BY:

- Any source that has emitted 100 tons or more per year of oxides of sulfur (SO_x) after 1999;
- Any source that emits or is allowed to emit 250 tons or more per year of PM_{10}, $PM_{2.5}$, volatile organic compounds (VOC), or ammonia;
- Any source that emits or is allowed to emit 2,500 tons or more per year of oxides of nitrogen (NO_x) or carbon monoxide (CO);
- Any source that has changed the total actual emissions of PM_{10}, SO_x, NO_x, CO, or VOC by (+/-) 40 tons or more per year from the most recently submitted inventory.
- Any Title V source that has **NOT** previously submitted an inventory.
- Any source located in Davis, Salt Lake, Utah, or Weber County that emits or is allowed to emit 25 tons per year or more of a combination of PM_{10}, SO_x, and NO_x that has **NOT** previously submitted an inventory;
- Any source located in Davis, Salt Lake, Utah or Weber County that emits or is allowed to emit 10 tons per year or more of VOC that has **NOT** previously submitted an inventory;

2007 INVENTORY REQUIREMENTS

The following table summarizes what is needed for the 2007 inventory submittal.

Table 1

2007 SOURCE CATEGORY REQUIREMENTS

Source Category	Data Requested
(1) Sources with ≥ 100 tons of actual SO_x emissions per year after 1999.	Submit detailed information on the inventory report forms for NO_x, SO_x, PM_{10}, $PM_{2.5}$, VOC, CO, ammonia, lead & it's compounds; and Annual Sulfur Dioxide Emission Report including any adjustment that needs to be made for the 2007 SO_x emissions to be comparable to the SO_x emissions in the **1998** emissions inventory; or Acid Rain Report Summary for 2007 including any adjustment that needs to be made for the 2006 SO_x emissions to be comparable to the **1999** Acid Rain Report.
(2) Sources with potential to emit (PTE) ≥ 2500 tons of NO_x or CO; or 250 tons or more per year of VOC, PM_{10}, $PM_{2.5}$, or ammonia	Submit detailed information on inventory report forms for SO_x, NO_x, PM_{10}, $PM_{2.5}$, VOC, CO, ammonia and lead & its compounds.
(3) Major sources, sources with PTE ≥ 5 tons of lead, and sources in Davis, Salt Lake, Utah, or Weber County with PTE ≥ 10 tons VOC or ≥ 25 tons NO_x, SO_x, and PM_{10} combined that have changed the total actual emissions of PM_{10}, SO_x, NO_x, CO, or VOC by (+/-) 40 tons or more per year from the most recently submitted inventory	Submit detailed information on inventory report forms for SO_x, NO_x, PM_{10}, $PM_{2.5}$, VOC, CO, lead & its compounds, ammonia, other chargeable pollutants, and hazardous air pollutants (HAPs). Use Form 1 to submit HAPs data.

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
108316	Maleic anhydride	8.51	0.00
7439965	Manganese	4.24	0.00
	Manganese Compounds	4.24	0.00
108394	m-Cresol	469.27	0.23
1600277	Mercuric Acetate	0.21	0.00
21908532	Mercuric Oxide	0.21	0.00
7439976*	Mercury	0.21	0.00
	Mercury Compounds	0.21	0.00
67561	Methanol	500.00	0.25
72435	Methoxychlor	212.2	0.11
151382	Methoxyethylmercuric Acetate	0.21	0.00
74839	Methyl bromide (Bromomethane)	82.41	0.04
74873	Methyl chloride (Chloromethane)	500.00	0.25
71556*	Methyl chloroform (1,1,1-Trichloroethane)	500.00	0.25
60344	Methyl hydrazine	0.40	0.00
74884	Methyl iodide (Iodomethane)	246.46	0.12
108101	Methyl isobutyl kentone (Hexone)	500.00	0.25
624839	Methyl isocyanate	0.99	0.00
502396	Methyl Mercuric Dicyanamide	0.21	0.00
80626	Methyl methacrylate	500.00	0.25
1634044	Methyl tert butyl ether	500.00	0.25
75092 *	Methylene chloride (Dichloromethane)	500.00	0.25
101688	Methylene diphenyl diisocyanate	1.09	0.00
60344	Methylhydrazine	0.40	0.00
108907	Monochlorobenzene	500.00	0.25
108383	m-Xylenes	500.00	0.25
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)	500.00	0.25
91203	Naphthalene	500.00	0.25
7440022	Nickel	31.83	0.02
	Nickel Compounds	2.12	0.00
90040	Nitrilotriacetic Acid Nickel(+2) H440022	0.00	0.00
34831033*	Nitrilotriacetic Acid, Antimony(+3	0.00	0.00
46242448*	Nitrilotriacetic Acid, Beryllium S	0.00	0.00
18432547*	Nitrilotriacetic Acid, Cobalt (+3)	0.00	0.00
23319519*	Nitrilotriacetic Acid, Manganese S	0.00	0.00
18983727*	Nitrilotriacetic Acit, Cadmium (+2	0.00	0.00
98953	Nitrobenzene	106.85	0.05
57147	N,N-Dimethylhydrazine	0.52	0.00

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
107062	Ethylene dichloride (1,2-Dichloroethane)	500.00	0.25
107211	Ethylene glycol	500.00	0.25
110496	Ethylene Glycol Monomethyl Ether A	0.00	0.00
122996	Ethylene Glycol Monophenyl Ether	0.00	0.00
2807309	Ethylene Glycol Monopropyl Ether	0.00	0.00
151564	Ethylene imine (Aziridine)	18.69	0.01
75218	Ethylene oxide	38.23	0.02
96457	Ethylene thiourea	0.00	0.00
75343	Ethylidene dichloride (1,1-Dichloroethane)	500.00	0.25
	Fine mineral fibers	21.22	0.01
50000	Formaldehyde	5.83	0.00
	Glycol ethers	0.00	0.00
112072	Glycol Monobutylether Acetate	0.00	0.00
76448	Heptachlor	1.06	0.00
118741	Hexachlorobenzene	0.04	0.00
87683	Hexachlorobutadiene	4.53	0.00
77474	Hexachlorocyclopentadiene	2.37	0.00
67721	Hexachloroethane	205.47	0.10
680319	Hexamethyl phosphoramide	0.00	0.00
822060	Hexamethylene-1,6-diisocyanate	0.72	0.00
110543	Hexane	500.00	0.25
108101	Hexone	500.00	0.00
107415	Hexylene Glycol	500.00	0.25
302012	Hydrazine	0.28	0.00
122667	Hydrazobenzene	0.00	0.00
7647010*	Hydrochloric acid	117.91	0.06
74908*	Hydrocyanic acid	82.15	0.04
7664393*	Hydrofluoric acid	38.82	0.02
7647010*	Hydrogen Chloride	117.91	0.06
74908*	Hydrogen Cyanide	82.15	0.04
7664393*	Hydrogen Fuoride	38.82	0.02
123319	Hydroquinone	42.41	0.02
540841	Isooctane	0.00	0.00
78591	Isophorone	446.85	0.22
98828	Isopropylbenzene AKA-Cumene	500.00	0.25
	Lead Compounds	0.00	0.00
58899	Lindane (all isomers)	10.61	0.01
74884	Iodomethane	246.40	0.12
	M/P Xylene	500.00	0.25

Table 1

2007 SOURCE CATEGORY REQUIREMENTS

Source Category	Data Requested
(4) Other Title V Sources statewide that have changed the total actual emissions of PM_{10}, SO_x, NO_x, CO, or VOC by (+/-) 40 tons or more per year from the most recently submitted inventory	Submit individual pollutant totals of all chargeable pollutants. Use Form B to submit data.
(5) Title V Sources statewide that started operations in 2007	Submit notification of when operations started. No inventory data is needed.
(6) Operating Title V Sources statewide that have not previously submitted an inventory	Contact Deborah McMurtrie at (801) 536-4187 for submittal forms and additional instructions.

ALSO OF NOTE:

- Electronic inventories must be submitted on a computer disk for legal and archival purposes.

- This may be one of the last submittals that will be needed from your company in this paper format. UDAQ has developed an electronic, automated, Excel-based reporting system that will be phased in for all companies over the next several years. This reporting system, customized to each companies' facilities, is designed to automate as many of the emissions calculations as possible.

- If you have received this paper inventory report, it is either because 1) you requested the reports or forms or 2) UDAQ has not yet developed the customized workbooks for your facilities.

- Dry cleaning equipment, halogenated solvent degreasers, chrome electroplaters, ethylene oxide sterilizers, and secondary aluminum smelters no longer make sources subject to Title V.

HOW TO UPDATE YOUR INFORMATION

The data can either be modified or verified as correct. Do the following steps to modify your data:

- Cross out the old data.
- Write in the new data above it.
- Correct any historical information that is incorrect.
- For new or significantly changed data, use the space provided at the bottom of each form.
- For any data field that is blank, fill in the missing information.
- For any data field that does not apply, write N/A (not applicable).
- If a form is blank and does not apply to your company, simply disregard it.

Remember, the requested emission information should be for the past calendar year – from January 1 through December 31, 2007.

ONCE YOUR FORMS ARE COMPLETE

Make a COPY of the report for your records and submit the ORIGINAL to:

ATTN: Emission Inventory
Utah Division of Air Quality
150 North 1950 West
Salt Lake City, UT 84116

The completed inventory report must be submitted by April 15, 2008. The date cannot be extended.

KEEP IN MIND

It is important to be accurate, concise, and to submit your report by the deadline. Failure to do so constitutes a violation of the Clean Air Act, and penalties may be accessed.

The information you submit is not considered confidential. Under State and Federal law, it becomes a matter of public record. The process information and the emissions data will be forwarded to EPA and incorporated in the National Emission Inventory (NEI), a public accessible database.

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
1319773	Cresols	469.27	0.23
1319773*	Cresols/Cresylic acid (isomers and mixt.)	469.27	0.23
98828	Cumene	500.00	0.25
101144	Curene (AKA-4,4-Methylene Bis(2Chloroaniline)	0.77	0.00
57125	Cyanide	0.00	0.00
	Cyanide Compounds	0.00	0.00
72559	DDE	0.00	0.00
121142	DNT	0.00	0.00
334883	Diazomethane	2.43	0.00
132649	Dibenzofurans	0.00	0.00
106934	Dibromoethane	0.00	0.00
84742	Dibutylphthalate	106.10	0.05
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	500.00	0.25
75092	Dichloromethane	500.00	0.25
62737	Dichlorvos	19.10	0.01
111422	Diethanolamine	42.44	0.02
64675	Diethyl sulfate	0.00	0.00
111466	Diethylene Glycol	0.00	0.00
111900	Diethylene Glycol Monoethyl Ether	0.00	0.00
124174	Diethylene Glycol Monoethyl Ether A	0.00	0.00
60117	Dimethyl aminoazobenzene	0.00	0.00
79447	Dimethyl carbamoyl chloride	0.00	0.00
68122	Dimethyl formamide	500.00	0.25
131113	Dimethyl phthalate	106.10	0.05
79469	Dimethylnitromethane	500.00	0.25
77781	Dimethyl sulfate	10.94	0.01
34590946	Dipropylene Glycol Methyl Ether	500.00	0.25
	Dipropylene Glycol Monomethyl Ether	0.00	0.00
95954	Dowicide B	0.00	0.00
95954	Dowicide 2	0.00	0.00
88062	Dowicide 2S	0.00	0.00
106898	Epichlorohydrin	40.15	0.02
100425	Ethenylbenzene	500.00	0.25
140885	Ethyl acrylate	323.67	0.16
100414	Ethyl benzene	500.00	0.25
51796	Ethyl carbamate (Urethane)	0.00	0.00
75003	Ethyl chloride (Chloroethane)	500.00	0.25
106934	Ethylene dibromide	0.00	0.00

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
7440417	Berylium	0.04	0.00
	Beryllium Compounds	0.01	0.00
57578	Beta-Propiolactone	31.27	0.02
92524	Biphenyl	26.77	0.01
542881	Bis(chloromethyl)ether	0.00	0.00
117817	Bis(2-ethylhexyl)phthalate (DEHP)	106.10	0.05
1375543	Bisphenol A Diglycidyl Ether	0.00	0.00
75252	Bromoform	109.70	0.05
74839	Bromomethane	82.41	0.04
106990	Butadiene	31.23	0.02
7440439	Cadium	0.07	0.00
	Cadium Compounds	0.01	0.00
156627	Calcium cyanamide	10.61	0.01
133062	Captan	106.10	0.05
63252	Carbaryl	106.10	0.05
75150	Carbon disulfide	500.00	0.25
	Carbon oxide sulfide (COS)	0.00	0.00
	Carbon oxysulfide	0.00	0.00
56235	Carbon tetrachloride	222.42	0.11
463581	Carbonyl sulfide	0.00	0.00
120809	Catechol	477.82	0.24
133904	Chloramben	0.00	0.00
57749	Chlordane	10.61	0.01
7782505*	Chlorine	30.77	0.02
79118*	Chloroacetic acid	4.88	0.00
108907	Chlorobenzene	500.00	0.25
510156	Chlorobenzilate	0.00	0.00
75003	Chloroethane	500.00	0.00
67663	Chloroform	500.00	0.25
74873	Chloromethane	500.00	0.25
107302	Chloromethyl methyl ether	0.00	0.00
126998	Chloroprene	500.00	0.25
7440473	Chromium	10.61	0.01
	Chromium Compounds	0.07	0.00
1333820	Chromium Oxide	0.07	0.00
18540299	Chromium VI	0.07	0.00
542756	Cis-1,3-Dichloropropene	96.32	0.05
7440484	Cobalt	0.42	0.00
	Cobalt Compounds	0.42	0.00
62207765	Cobalt, ((2,2'-1(1,2-Ethanediylbis	0.42	0.00
	Coke Oven Emissions	0.00	0.00
544923	Copper(1)Cyanide	0.00	0.00

FOR MORE INFORMATION

If you did not receive a packet or you need instructions or forms which are not provided in your report, contact Deborah McMurtrie at (801) 536-4187 or Dmcmurtrie@utah.gov and she will mail out the requested forms. Also, the inventory link http://www.airquality.utah.gov/inventory/forms_list.htm allows you to print or download the information you need in PDF format. A list of all inventory forms is provided (see Table 4).

Lead

Elemental Lead (Pb) and its compounds are to be included on various forms as a criteria pollutant. Elemental lead should be measured by using a reference method explained in appendix G of 40 CFR Part 50.

Hazardous Air Pollutants (HAPs)

HAP emissions are being requested from sources. EPA has developed HAP emission factors for some types of processes. Please check a current AP-42 document for factors applicable to your company. AP-42 emission factors can be found on the Internet at: http://www.epa.gov/ttn/chief/ap42/index.html. If the total amount of an individual HAP emitted by the source is below the level listed in Table 8, HAPs De Minimus Emissions Levels, reporting of that HAP is not required.

Sources under “Other Title V Sources Statewide” of Table 1 on page 2 must keep the calculations used to derive the emission totals for compliance purposes.

NOTE: Toxic Release Inventory (TRI) Federal Regulations do not apply to this inventory.

Other regulated pollutants

These are air pollutants that are neither criteria pollutants nor hazardous air pollutants, yet are federally regulated and reportable. They are to be reported on Form 1 and Form B, and are chargeable under the Title V program.

Table 2 OTHER REGULATED POLLUTANTS	
Total reduced sulfur	Hydrogen sulfide (sulfuric acid)
Dioxin/furan (total tetra-through octachlorinated dibenzo-p-dioxins and dibernzofurans)	Municipal solid waste landfill Non-methane organic compounds
Fluorides	Sulfuric acid mist

Breakdown emissions

The total emissions from each process are required to be reported. This includes any emissions that occur due to a breakdown, whether or not the breakdown is reported to DAQ. Please enter the total emissions on the forms. The "Other Title V Sources Statewide" listed in Table 1 on page 2 that are not submitting detailed data must include breakdown emissions in the individual pollutant totals on Form B.

Previously Submitted Inventory Data

Previously submitted inventory data can be obtained by contacting Deborah McMurtrie by telephone at (801) 536-4187 or by e-mail at Dmcmurtrie@Utah.gov.

Medical Waste Incinerators

These facilities are subject to Federal New Source Performance Standards (NSPS) and the Operating Permits rule R306-415. This includes the submittal of a complete inventory of air emissions from all emission sources at the facility, not just from the incinerator.

Stack test data or the following factors may be used to calculate emissions from the medical waste incinerator.

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
75558	2-Methylaziridine	99.00	0.05
79469	2-NP	500.00	0.25
79469	2-Nitropropane	500.00	0.25
91941	3,3-Dichlorobenzidine	0.00	0.00
119904	3,3-Dimethoxybenzidine	0.00	0.00
119937	3,3'-Dimethyl benzidine	0.00	0.00
96128	3-Chloro-1,2-dibromopropane	0.00	0.00
91941	4,4-Diamino-3,3-dichlorobiphenyl	0.00	0.00
101144	4,4-Methylene bis(2-chloraniline)	0.77	0.00
101144	4,4'-Methylenebis[2-chlorobenzenamine]	0.77	0.00
101779	4,4'-Methylene dianiline	17.21	0.01
534521	4,6-Dinitrol-o-cresol and salts	4.24	0.00
101779	4-(4-Aminobenzyl)aniline	17.21	0.01
92671	4-Aminobiphenyl	0.00	0.00
92933	4-Nitrobiphenyl	0.00	0.00
100027	4-Nitrophenol	0.00	0.00
75070	Acetaldehyde	500.00	0.25
60355	Acetamide	0.00	0.00
75070	Acetic Aldehyde	500	0.25
75058	Acetonitrile	500.00	0.25
98862	Acetophenone	500.00	0.25
107028	Acrolein	3.62	0.00
79061	Acrylamide	0.64	0.00
79107*	Acrylic acid	125.08	0.06
107131	Acrylonitrile	92.08	0.05
51285	Aldifen	0.00	0.00
107051	Allyl chloride	66.39	0.03
62533	Aniline	161.64	0.08
7440360	Antimony	10.61	0.01
	Antimony Compounds	10.61	0.01
7783702	Antimony Pentafluoride	10.61	0.01
	Arsenic	0.21	0.00
	Arsenic Compounds	0.07	0.00
1327533	Arsenic Trioxide	0.07	0.00
7784421	Arsine	3.38	0.00
1332214	Asbestos	0.00	0.00
71432	Benzene (including benzene for gasoline)	33.90	0.02
	Benzene Sol Org	095.0	.050
92875	Benzidine	0.00	0.00
98077	Benzotrichloride	12.64	0.01
100447	Benzyl chloride	109.86	0.05

Table 8 (Continued)

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
106887	1,2-Butylene Oxide	0.00	0.00
96128	1,2-Dibromo-3-chloropropane	0.00	0.00
106934	1,2-Dibromoethane	0.00	0.00
107062	1,2-Dichloroethane	500.00	0.25
78875	1,2-Dichloropropane	500.00	0.25
95476	1,2-Dimethylbenzene	500.00	0.25
122667	1,2-Diphenylhydrazine	0.00	0.00
106887	1,2-Epoxybutane	0.00	0.00
1120714	1,2-Oxathiolane 2,2-dioxide	0.00	0.00
75558	1,2-Propylenimine (2-Methylaziridine)	99.10	0.05
106990	1,3-Butadiene	31.28	0.02
542756	1,3-Dichloropropene	96.30	0.05
108383	1,3-Dimethylbenzene	500.00	0.25
1120714	1,3-Propane sultone	0.00	0.00
106467	1,4-Dichlorobenzene(p)	500.00	0.25
123911	1,4-Diethyleneoxide	500.00	0.25
106423	1,4-Dimethylbenzene	500.00	0.25
123911	1,4-Dioxane	500.00	0.25
106898	1-Chloro-2,3-epoxypropane	40.15	0.02
121142	1-Methyl-2,4-dinitrobenzene	4.24	0.00
540841	2,2,4-Trimethylpentane	0.00	0.00
1746016	2,3,7,8-Tetrachlorodibenzo-p-Dioxin	0.00	0.00
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00	0.00
94757*	2,4 Dichlorophenoxyacetic acid	212.20	0.11
95954	2,4,5-Trichlorophenol	0.00	0.00
88062	2,4,6-Trichlorophenol	0.00	0.00
94757*	2,4-D, salts and esters	212.20	0.11
95807	2,4-Diaminotoluene	0.00	0.00
584849	2,4-Diisocyanatoluene	0.76	0.00
51285	2,4-Dinitrophenol	0.00	0.00
121142	2,4-Dinitrotoluene	4.24	0.00
51285	2,4-DNP	0.00	0.00
95807	2,4-Toluene diamine	0.00	0.00
584849	2,4-Toluenediisocyanate	0.76	0.00
53963	2-Acetlyaminofluorene	0.00	0.00
111762	2-Butoxy-Ethanol	500.00	0.25
532274	2-Chloroacetophenone	6.71	0.00
126998	2-Chloro-1,3,Butadiene	500.00	0.25
532274	2-Chloro-1-phenylethanone	6.71	0.25

Table 3

MEDICAL WASTE INCINERATOR EMISSION FACTORS

Pollutant	Emission factors, lb emitted per lb waste charged					
	Combustion Control Gas Residence Time			Wet Scrubbers	Dry Scrubber without carbon	Dry Scrubber with carbon
	1/4 Second	One Second	Two Seconds			
Dioxin/ Furan	0	4.45E-08	3.65E-09	4.260e-10	3.65E-09	7.04E-11
D/F:TEQ	3.96E-09	9.09E-10	7.44E-11	1.010e-11	7.44E-11	1.68E-12
CO	8.12E-03	3.45E-03	1.52E-04	0.0002	1.52E-04	1.52E-04
PM10	0	0.00238	0.0015	see notes	0	0
HCl	0	2.24E-02	2.24E-02	0	4.37E-04	4.37E-04
Pb	3.80E-05	3.80E-05	3.80E-05	0	1.31E-07	1.31E-07
SO2	3.20E-04	3.20E-04	3.20E-04	0.0003	3.20E-04	3.20E-04
Hg (see notes)	3.70E-05	3.70E-05	3.70E-05	0	3.70E-05	1.66E-06
Cd	4.10E-06	4.10E-06	0	0	2.60E-08	2.60E-08
NOx	0	1.51E-03	0.0015	0.00151	1.51E-03	0.0015

Notes:

Emissions of pollutant = [Tons/yr of waste] x [Emission factor of the pollutant] x [(1 - efficiency)/100]

Wet Scrubber Efficiencies for PM_{10} are as follows: Low - 5.66E-4, Moderate - 2.08E-4, and High Efficiency - 1.04E-4.

With waste separation, the Hg emission factor for combustion control and dry scrubber without carbon would be 1.10E-5.

For any questions about the Operating Permits program as it applies to these facilities, please call Dave Beatty at (801) 536-4060 or e-mail him at dbeatty@utah.gov.

INVENTORY FORMS

The following table lists the inventory submittal forms. If a form does not apply to your operation, you may disregard it.

Table 4

INVENTORY FORMS

Form #	Form Name	Purpose
A	Company/Site Information	Current or updated company name, address, phone, contact, and site information.
B	Summary - Total Emissions by Site (tons/year)	Provides a grand total of all criteria emissions, as well as HAP and other regulated pollutants associated with the company from all sites.
F2	Process/Fuel Information	F2, F3, and F4 together comprise a general set of reporting forms, suitable for any company for which there is no specific reporting form suitable for their processes.
F3	Emissions for Controlled and Uncontrolled Processes	
F4	Stack Information (stacks associated with F2 and F3)	
F5	Operating Time	Central location for listing process times
F6a	Fugitive Emissions (not exhausted through stacks or control facilities)	Uncontrolled or uncontrollable emissions from a process.

Table 7 (Continued)

VALID ESTIMATING METHOD CODES FOR SPECIFIC PROCESSES

Estimation Methods: Preferred (P) or Alternative (A)

Source Category	Material balance	Emission Factors	Source Testing	CEM	Emission Models/ Predictive Monitoring[a]	Fuel Analysis	Engineering Calculations
Wastewater Collection and Treatment	A	A	A		P		A
Wood Furniture, Surface Coating	P, A	A	P, A		A		

[a] Predictive emission monitoring is an estimation method where emissions are correlated to process parameters based on demonstrated correlations. Reference: *Emission Inventory Improvement Preferred and Alternative Methods.* Volume I, Introduction to the EIIP, and Volume II, Point Sources.

Table 8

HAPS DE MINIMIS LEVELS

HAPs that are not chargeable are shaded. Unless otherwise indicated by * in the CAS # column, all these HAPs are also considered VOCs or PM_{10}.

CAS #	Pollutant	Minimum Emissions (lbs/yr)	Corresponding Tons/Yr
71556 *	1,1,1-Trichloroethane	500.00	0.25
79345	1,1,2,2-Tetrachloroethane	145.68	0.07
79005	1,1,2-Trichloroethane	500.00	0.25
72559	1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene)	0.00	0.00
75343	1,1-Dichloroethane	500.00	0.25
75354	1,1-Dichloroethylene	420.71	0.21
57147	1,1-Dimethyl hydrazine	0.52	0.00
120821	1,2,4-Trichlorobenzene	500.00	0.25
120821	1,2,4-Trichlorobenzol	500.00	0.25
106887	1,2-Butene oxide	0.00	0.00

Table 7 (Continued)

VALID ESTIMATING METHOD CODES FOR SPECIFIC PROCESSES

Estimation Methods: Preferred (P) or Alternative (A)							
Source Category	**Material balance**	**Emission Factors**	**Source Testing**	**CEM**	**Emission Models/ Predictive Monitoring[a]**	**Fuel Analysis**	**Engineering Calculations**
Hot-Mix Asphalt Plants		P	P	A	A	P	
Magnet Wire, Surface Coating	P, A	A	P, A		A		
Metal Cans, Surface Coating	P, A	A	P, A		A		
Metal Coil, Surface Coating	P, A	A	P, A		A		
Metal Furniture, Surface Coating	P, A	A	P, A		A		
Miscellaneous Metal Parts, Surface Coating	P, A	A	P, A		A		
Oil & Gas Field Production & Processing		P, A	A	A	P		
Paper Coating, Surface Coating	A	P, A	A		P		
Plastic Products Manufacturing	P, A	A	P, A		A		
Plastic Parts, Surface Coating	P, A	A	P, A		A		
Secondary Metal Processing		P, A	P, A	P, A			
Semiconductor manufacturing	P	A	P, A				A
Ships, Surface Coating	P, A	A	P, A		A		

Table 4

INVENTORY FORMS

Form #	Form Name	Purpose
F6b	Fugitive Emissions - Solvents or Coatings (including paint booths exhausting through a vent or stack) Vapor Degreasers use F14.	Uncontrolled or uncontrollable VOC emissions specifically from a solvent or coating process.
F6c	Fugitive Spray Booth Stack Information	For paint booth stacks associated with F6b.
F7	Sand & Gravel Operations	PM10 emissions from crushing operations.
F8	Concrete Batch Plant	PM10 emissions from concrete batch plants.
F9a	Asphalt Plant	Emissions from Asphalt Plants
F9b	Asphalt Plant Stack	Stack information associated with F9a.
F10	Cutback Asphalt Plant	Emissions from Asphalt Plants
F11a	Fugitive Dust - Roads	PM10 emissions from road traffic on company-used/owned roads.
F11b	Fugitive Dust - Storage Piles	PM10 emissions from company's storage piles.
F12	Off-Highway Mobile Sources	Emissions from company vehicles other than from their public thoroughfare usage.
F13	Quarry & Mining Activities	Emissions from drilling and blasting.
F14	Vapor Degreaser	VOC emissions from degreaser tanks.

Table 4

INVENTORY FORMS

Form #	Form Name	Purpose
F15a	Engines (engines other than off-highway mobile sources)	Emissions from engines such as turbines and generators.
F15b	Engine Stack	Stack information associated with F15a.
F16	Information previously submitted on this form should be provided on F15a Engines	
F17	Loading Racks - Refining/Production	VOC emissions from loading racks.
F18a	Internal Floating Roof Storage Tanks	Replaced by EPA Tanks software
F18b	External Floating Roof Storage Tanks	
F19a	Vertical Fixed Roof Storage Tanks	
F19b	Horizontal Fixed Roof Storage Tanks	
	Supplement to F18 & F19	
F20a	Refinery Fugitive VOC Emissions	Fugitive VOC emissions from refinery processes.
F20b	Refinery Fugitive VOC Emissions Using Correlation Equations	Include Supplement F20b to document monitored components.
F22	Bakery VOC Emissions	VOC emissions from baked bread products.

ALSO OF NOTE:

Form B: SUMMARY -Total Emissions by Site

Please provide a summary of facility emissions by site on Form B. In addition to criteria pollutants, this form is to include individual HAPs and other chargeable pollutants emitted by sources.

Table 7

VALID ESTIMATING METHOD CODES FOR SPECIFIC PROCESSES

Estimation Methods: Preferred (P) or Alternative (A)

Source Category	Material balance	Emission Factors	Source Testing	CEM	Emission Models/ Predictive Monitoring[a]	Fuel Analysis	Engineering Calculations
Aircraft Manufacturing, Surface Coating	P, A	A	P, A		A		
Appliances, Surface Coating	P, A	A	P, A		A		
Automobiles and Light-duty Trucks, Surface Coating	P, A	A	P, A		A		
Automobile Refinishing, Surface Coating	P, A	A	P, A		A		
Boilers		A	P	P		P	
Equipment Leaks		A	A		P		
Flat Wood Product Manufacturing, Surface Coating	P, A	A	P, A		A		
Heavy-duty Truck Manufacturing, Surface Coating	P, A	A	P, A		A		

Table 6 EMISSIONS ESTIMATE METHOD CODES	
Estimate Code	**Estimate Method Description**
Note: The numbering of the estimate codes has been modified due to EPA's move from AIRS to NET in 1999. Be sure to review and correct the codes in your submittal as needed. The most up-to-date version of AP-42 can be found on the EPA Homepage on the Internet at: http://www.epa.gov/ttn/chief/ap42/index.html	

If your source is in the "Other Title V Sources Statewide" category as listed in Table 2, only submit Form A and a Form B for each site. Indicate if the HAPs are reported as PM_{10} or VOCs. Remember to keep the calculations of the totals for compliance purposes.

Form 5 - Operating Hours

This form is designed to reduce repetitive reporting of the operating hours for a site. If all processes at a site have the same operating hours, enter that information on Form 5 and write "All Processes" in the Description field.

Form F18a-F19b - Replaced by TANKS

The U.S. EPA recommends the use of the latest version of TANKS (currently version 4.09D) for the estimation of emissions from storage tanks. TANKS is designed for use by local, state, and federal agencies, environmental consultants, and others who need to calculate VOC emissions from organic liquid storage tanks.

TANKS is a Windows-based computer software program that computes estimates of VOC emissions from fixed- and floating-roof storage tanks. TANKS is based on the emission estimation procedures from Chapter 7 of EPA's Compilation of Air Pollutant Emission Factors (AP-42), plus recent updates from the American Petroleum Institute. A user's manual, included with the program, explains the many features and options of TANKS. The program includes on-line help for every screen.

The software can be downloaded from the EPA web page:
http://www.epa.gov/ttn/chief/software/tanks/index.html#order.

Be aware, you must include the full output of TANKS 4.09D with your emissions inventory submittal.

Form F20b

Form F20b has been formatted for refinery fugitive emissions resulting from the correlation equation calculation method. Supplement Form 20b is provided for documenting each of the monitored components.

Ozone Season (June 1 through August 31)

Since Salt Lake and Davis Counties are now maintenance areas for ozone, **NO Ozone Season Inventory is required.**

Portable Equipment

Portable equipment includes equipment such as asphalt plants, concrete batch plants, portable generators, and associated support equipment, which may operate in multiple locations during the course of a calendar

year. Each separate location or county that a plant or crusher is operated at, during the course of the year, must be reported separately. The corresponding county of operation should be entered in the county field.

Only totals of individual pollutants from non-major Title V portable sources operating outside Davis, Salt Lake, Weber, and Utah Counties need to be submitted. These totals should be submitted on Form B. If your equipment operated at multiple sites during 2007, you will need to complete a Form B for each site. Include HAPs and other chargeable pollutants and indicate if they are reported as PM_{10} or VOCs.

DEFINITIONS

Estimate Code means emission estimate method codes required by EPA for reporting purposes. A valid method code of quantifying actual emissions is required wherever an emission estimate appears on a form. The valid method codes are listed in Table 7 of this document. These are the only codes which will be accepted.

Facility is machinery, equipment, structures of any part or accessories installed or acquired for the primary purpose of controlling or disposing of air pollution. It does not include an air conditioner, fan, or other similar device for the comfort of personnel.

Fugitive Emissions are emissions from an installation or facility which are neither passed through an air cleaning device nor vented through a stack or could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

NESHAP Source is any stationary source of any of the 187 HAPs listed in §112(b)(1) of the Clean Air Act for which the EPA Administrator, under the authority of §112(d), has adopted an emissions standard that is published in 40 CFR Part 61 or Part 63. These 187 pollutants were listed by Congress because it determined that emissions of those HAPs may individually, or in aggregate, present significant risks to public health in urban areas. Once a pollutant is regulated under a NESHAP, it is regulated for all sources of that pollutant.

NSPS Source is any stationary source of pollution for which the Administrator of EPA adopted a national standard that is published in 40 CFR Part 60. These categories of sources were established because it was determined the category contributed significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.

Table 5

EMISSIONS CONTROL DEVICE CODES (NET)

Control Facility Code	Control Facility Description
207	Carbon Injection
208	Freeboard Refrigeration Device

Table 6

EMISSIONS ESTIMATE METHOD CODES

Estimate Code	Estimate Method Description
00	No Code Given
01	CEMs (Continuous Emission Monitoring
02	Engineering judgement
03	Material Balance
04	Stack Test
05	EPA Speciation Profile
06	State/Local Speciation Profile
07	Manufacturer Speciation
08	EPA Emission Factor
09	State/Local Emission Factor
10	Site Specific Emission Factor
11	Vender Emission Factor
12	Trade Group Emission Factor

Table 5 EMISSIONS CONTROL DEVICE CODES (NET)	
Control Facility Code	**Control Facility Description**
134	Demister
137	HVAF
138	Boiler at Landfill
139	SCR (Selective Catalytic Reduction)
139	SCR (Selective Catalytic Reduction)
140	NSCR (Non-Selective Catalytic Reduction)
141	Wet Scrubber
143	Wet Suppression
144	Spray Screen
145	Single Wet Cap
146	Wet Electrostatic Precipitator
147	Increased Air/fuel Ratio with Intercooling
148	Clean Burn
149	Pre-combustion Chamber
150	Mechanical Collector
151	Fiber Mist Eliminator
152	Mist Eliminator - High Efficiency
153	Water Sprays
154	Screened Drums or Cages
155	Packed Bed Scrubber - High Efficiency
157	Screen
158	Ionizing Wet Scrubber
159	Electrified Filter Bed
201	Knock Out Box
202	Spray Dryer
203	Catalytic Converter
204	Overfire Air
205	Low NOX Burners
206	Dry Sorbent Injection

Percentage of Annual Hours of Operation is the percent of the total yearly operating activity which occurs during each calendar month. Operating hours are being reported collectively on Form 5.

SCC means Source Classification Code. These codes are established by EPA. Theoretically, an SCC represents a unique process or function within a source category associated with an emission point. SCCs can be downloaded from the EPA OQAPS web site: http://www.epa.gov/ttn/chief/codes/index.html#scc.

Source is any structure, building, facility, or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act and which is located on one or more continuous or adjacent properties and which is under the control of the same person or persons (under common control). A building, structure, facility, or installation means all of the pollutant-emitting activities which belong to the same industrial grouping.

UTM Coordinates means Universal Transverse Mercator (UTM) geographic coordinates, specified by the UTM zone, horizontal coordinate, and vertical coordinate. Utah falls within zones 11 and 12.

VOC for the purposes of criteria pollutant emission inventory reporting means any compound of carbon (other than carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, metallic carbides, and ammonium carbonate) which participates in atmospheric photochemical reactions. A company must report all reactive VOC emissions (including fugitive emissions.)

Do not report VOC emissions from the following which are nonreactive:

1 chloro-1-fluoroethane (HCFC-151a);
1-chloro 1,1-difluoroethane (HCFC-142b);
1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane $C_4F_9OC_2H_5$);
1,1-dichloro 1-fluoroethane (HCFC-141b);
1,1-difluoroethane (HFC-152a);
1,1,1-trichloroethane (methyl chloroform);
1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
1,1,1-trifluoroethane (HFC-143a);
1,1,1,2-tetrafluoroethane (HFC-134a);
1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-$C_3F_7OCH_3$)
1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane $C_4F_9OCH_3$);
1,1,1,2,3-pentafluoropropane (HFC-245eb);
1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea)

1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
1,1,1,3,3-pentafluorobutane (HFC-365mfc);
1,1,1,3,3-pentafluoropropane (HFC-245fa);
1,1,1,3,3,3-hexafluoropropane (HFC-236fa);
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
1,1,2,2-tetrafluoroethane (HFC-134);
1,1,2,2,3-pentafluoropropane (HFC-245ca);
1,1,2,3,3-pentafluoropropane (HFC-245ea);
1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane
($(CF_3)_2CFCF_2OCH_3$);
2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane
($(CF_3)_2CFCF_2OC_2H_5$);
3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane
3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca);
acetone;
chlorodifluoromethane (HCFC-22);
chlorofluoromethane (HCFC-31);
chloropentafluoroethane (CFC-115);
cyclic, branched, or linear completely methylated siloxanes;
dichlorodifluoromethane (CFC-12);
difluoromethane (HFC-32);
ethane;
ethylfluoride (HFC-161);
methane;
methyl acetate;
methyl formate ($HCOOCH_3$)
methylene chloride (dichloromethane);
parachlorobenzotrifluoride (PCBTF);
pentafluoroethane (HFC-125);
perchloroethylene (tetrachloroethylene);
trichlorofluoromethane (CFC-11);
trifluoromethane (HFC-23);
perfluorocarbon compounds which fall into these classes:

- Cyclic, branched, or linear, completely fluorinated alkanes;
- Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
- Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
- Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Table 5

EMISSIONS CONTROL DEVICE CODES (NET)

Control Facility Code	Control Facility Description
102	Low Solvent Coatings
103	Powder Coatings
104	Waterborne Coatings
105	Process Modification - Electrostatic Spraying
106	Dust Suppression by Physical Stabilization
107	Selective Noncatalytic Reduction for NOx
108	Dust Suppression - Traffic Control
109	Catalytic Oxidizer
110	Vapor Recovery Unit
112	Afterburner
113	Rotoclone
115	Impingement Type Wet Scrubber
116	Catalytic Incinerator
117	Packed Scrubber
118	Crossflow Packed Bed
119	Dry Scrubber
120	Floating Bed Scrubber
121	Multiple Cyclones
122	Quench Tower
123	Spray Scrubber
124	High Pressure Scrubber
125	Low Pressure Scrubber
127	Fabric Filter
128	Electrostatic Precipitator
129	Scrubber
130	Caustic Scrubber
131	Thermal Oxidizer
132	Condenser
133	Incinerator

Table 5 EMISSIONS CONTROL DEVICE CODES (NET)	
Control Facility Code	**Control Facility Description**
073	Refrigerated Condenser
074	Barometric Condenser
075	Single Cyclone
076	Multiple Cyclone w/o Fly Ash Reinjection
077	Multiple Cyclone w/Fly Ash Reinjection
078	Baffle
079	Dry Electrostatic Granular Filter
080	Chemical Oxidation
081	Chemical Reduction
082	Ozonation
083	Chemical Neutralization
084	Activated Clay Adsorption
085	Wet Cyclonic Separator
086	Water Curtain
087	Nitrogen Blanket
088	Conservation Vent
089	Bottom Filling
090	Conversion to Variable Vapor Space Tank
091	Conversion to Floating Roof Tank
092	Conversion to Pressurized Tank
093	Submerged Filling
094	Underground Tank
095	White Paint
096	Vapor Lock Balance Recover System
097	Installation of Secondary Seal for External
098	Moving Bed Dry Scrubber
099	Unspecified (describe control facility)
100	Baghouse
101	High Efficiency Particulate Air Filter (HEPA)

CALCULATIONS

The equations used to calculate the emissions for detailed 2007 inventory data must be included as part of the submittal for it to be considered complete.

If AP-42 emission factors are used in the calculating of emissions, the most current edition of AP-42 must be used. Any inventories submitting calculations using out-of-date factors will not be considered complete. Current AP-42 emission factors can be found on the Internet at: http://www.epa.gov/ttn/chief/ap42/index.html

If there are questions about the information necessary to calculate emissions, please contact Scott Hanks of the UDAQ Emissions Inventory staff at (801)536-4066 or Shanks@utah.gov. He is available to answer questions and assist with emission calculations.

Table 5 EMISSIONS CONTROL DEVICE CODES (NET)	
Control Facility Code	**Control Facility Description**
000	Uncontrolled
001	Wet Scrubber - High Efficiency 95-99%
002	Wet Scrubber - Medium Efficiency 80-95%
003	Wet Scrubber - Low Efficiency < 80%
004	Gravity Collector - High Efficiency 95-99%
005	Gravity Collector - Medium Efficiency 80-95%
006	Gravity Collector - Low Efficiency < 80%
007	Centrifugal Collector - High Efficiency 95-99%
008	Centrifugal Collector - Medium Efficiency 80-95%
009	Centrifugal Collector - Low Efficiency < 80%
010	Electrostatic Precipitator - High Efficiency 95-99%
011	Electrostatic Precipitator - Medium Efficiency 80-
012	Electrostatic Precipitator - Low Efficiency < 80%
013	Gas Scrubber (general, not classified)

Table 5

EMISSIONS CONTROL DEVICE CODES (NET)

Control Facility Code	Control Facility Description
014	Mist Eliminator - High Velocity, i.e., v>250 ft/min
015	Mist Eliminator - Low Velocity, i.e., v>259 ft/min
016	Fabric Filter - High Temperature, i.e., T>250 F
017	Fabric Filter - Medium Temperature, i.e., F
018	Fabric Filter - Low Temperature, i.e., T<180 F
019	Catalytic Afterburner
020	Catalytic Afterburner w/ Heat Exchanger
021	Direct Flame Afterburner
022	Direct Flame Afterburner w/ Heat Exchanger
023	Flaring
024	Modified Furnace or Burner Design
025	Staged Combustion
026	Flue Gas Recirculation
027	Reduced Combustion - Air Preheating
028	Steam or Water Injection
029	Low Excess Air Firing
030	Use of Fuel with Low Nitrogen Content
031	Air Injection
032	Ammonia Injection
033	Stoichiometric Firing
034	Wellman-Lord/Sodium Sulfite Scrubbing
035	Magnesium Oxide Scrubbing
036	Dual Alkali Scrubbing
037	Citrate Process Scrubbing
038	Ammonia Scrubbing
039	Catalytic Oxidation - Flue Gas Desulfurization
040	Alkalized Alumina
041	Dry Limestone Injection
042	Wet Limestone Injection
043	Sulfuric Acid Plant - Contact Process

Table 5

EMISSIONS CONTROL DEVICE CODES (NET)

Control Facility Code	Control Facility Description
044	Sulfuric Acid Plant - Double Contact Process
045	Sulfur Plant
046	Process Change
047	Vapor Recovery System (including condensers,
048	Activated Carbon Adsorption
049	Liquid Filtration System
050	Packed-Gas Absorption Column
051	Tray-Type Gas Absorption Column
052	Spray Tower
053	Venturi Scrubber
054	Process Enclosed
055	Impingement Plate Scrubber
056	Dynamic Separator (Dry)
057	Dynamic Separator (Wet)
058	Mat or Panel Filter
059	Metal Fabric Filter Screen (Cotton Gins)
060	Process Gas Recovery
061	Dust Suppression by Water Sprays
062	Dust Suppression by Chemical Stabilizers or
063	Gravel Bed Filter
064	Annular Ring Filter
065	Catalytic Reduction
066	Molecular Sieve
067	Wet Lime Slurry Scrubbing
068	Alkaline Fly Ash Scrubbing
069	Sodium Carbonate Scrubbing
070	Sodium-Alkali Scrubbing
071	Fluid Bed Dry Scrubber
072	Tube and Shell Condenser